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Sustainable trade or protectionism? examining the eu's mechanism for restricting indonesian crude palm oil imports for biofuels

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Abstrack: *This study analyzes the mechanism of the European Union's (EU) import restrictions on Crude Palm Oil (CPO) from Indonesia, implemented through the Renewable Energy Directive (RED) and the European Union Deforestation Regulation (EUDR). The main issue examined in this research is how the EU enforces non-tariff regulations affecting Indonesia's CPO exports, particularly through environmental standards, sustainability certifications such as RSPO and ISPO, as well as due diligence and traceability systems. This study employs a qualitative descriptive method with a literature review approach, analyzing secondary data from journals, institutional reports, and relevant literature.The findings indicate that RED and EUDR policies have negatively impacted Indonesia's palm oil sector, leading to a decline in exports to the EU, domestic oversupply causing a drop in fresh fruit bunch (FFB) prices, and significant economic consequences for small farmers. Furthermore, the strict implementation of environmental standards and certification requirements limits market access for Indonesian palm oil producers, particularly those lacking the technology and capital to meet EU requirements. This study highlights the importance of economic diplomacy strategies and technological innovations to maintain the competitiveness of Indonesian palm oil in the global market.*
Keywords*: Crude Palm Oil, Renewable Energy Directive, Deforestation Regulation, European Union, Sustainability Certification..*

Abstrack: Penelitian ini menganalisis mekanisme pembatasan impor Crude Palm Oil (CPO) oleh Uni Eropa dari Indonesia yang diterapkan melalui kebijakan Renewable Energy Directive (RED) dan European Union Deforestation Regulation (EUDR). Masalah utama dalam penelitian ini adalah bagaimana Uni Eropa menerapkan regulasi non-tarif yang berdampak pada ekspor CPO Indonesia, terutama dalam bentuk standar lingkungan, sertifikasi keberlanjutan seperti RSPO dan ISPO, serta sistem uji tuntas dan keterlacakan. Penelitian ini menggunakan metode deskriptif kualitatif dengan pendekatan studi kepustakaan, menganalisis data sekunder dari jurnal, laporan lembaga, dan literatur yang relevan.Hasil penelitian menunjukkan bahwa kebijakan RED dan EUDR berdampak negatif terhadap sektor kelapa sawit Indonesia, termasuk penurunan ekspor ke Uni Eropa, kelebihan pasokan domestik yang menyebabkan turunnya harga tandan buah segar (TBS), serta dampak ekonomi yang signifikan bagi petani kecil. Selain itu, penerapan standar lingkungan dan sertifikasi yang ketat membatasi akses pasar bagi produsen sawit Indonesia, terutama mereka yang tidak memiliki teknologi dan modal untuk memenuhi persyaratan Uni Eropa. Studi ini menyoroti pentingnya strategi diplomasi ekonomi dan inovasi teknologi untuk menjaga daya saing minyak sawit Indonesia di pasar global.
Kata Kunci: Crude Palm Oil, Renewable Energy Directive, Deforestation Regulation, Sertifikasi Keberlanjutan.

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INTRODUCTION

Energy is a basic necessity for all countries. Energy can be a driver of economic growth, prosperity, and the movement of household industries. For the past 200 years, energy has been an international issue and a topic of discussion because it serves as evidence of human necessity (Chikita Carnelian, 2017). However, energy demand continues to rise each year, increasing the burden on countries as they search for new sources to meet their energy needs. The competition between countries to ensure national energy security tends to influence a nation's power; the more independent a country is in terms of energy, the more powerful it becomes (Novitasari, Sunarko, & Molasy, 2021). As energy demand grows within a country, the nation is required to seek energy sources to fulfill its needs.

One of the regions that requires a significant amount of energy is Europe. The energy used by European Union member states largely comes from fossil fuels. The European Union is the world's largest energy importer and has a high dependence on fossil fuels. The high use of fossil fuels contributes to the increase in global warming in the European region (Molasy, 2024). To reduce the impact of global warming, countries around the world have agreed to reduce CO2 emissions in the atmosphere. One of these agreements is the Kyoto Protocol, which was adopted at the Conference of the Parties in Kyoto, Japan, and came into effect on February 16, 2005. EU member states are working to meet the Kyoto Protocol agreement by reducing fossil fuel consumption and replacing it with biofuels.

Biofuel is a type of fuel derived from biomass, which comes from animals and plants. Biofuel is a renewable raw material. In this context, biofuel refers to solid, liquid, and gas fuels derived from biomass. (Debalina & Ralph, 2013) Biofuel is created from specially processed organic materials. Biofuels can come from forests, agriculture, fish products, or food. In general, biofuel is a type of fuel made from biomass, primarily derived from plants and animals, although it is usually plant-based. Biofuels are categorized into several types, including bioethanol, biodiesel, and biogas.First, bioethanol. This fuel is an alcohol derived from plants such as wheat, sugarcane, corn, cassava, sweet potatoes, fruits, and even vegetable waste. Second, biodiesel. This fuel is made from oils like soybean oil, rapeseed oil, castor oil, and sunflower oil.Third, biogas. Biogas is a fuel created from the fermentation of plant waste or animal manure. (Maizega, 2010)

One of the biofuels used by the European Union is biodiesel. Biodiesel is a fuel made from soybean oil, canola oil, castor oil, and sunflower oil. To encourage the shift from fossil fuel energy to biofuel energy, the European Union implemented a policy in 2018 called the Renewable Energy Directive and Renewable Energy Directive II, or RED II. The core of the RED II policy issued by the EU is to reduce greenhouse gas emissions and deforestation in the European Union. To develop the biofuel industry, the EU cannot meet its raw material needs domestically due to limited land and climate conditions. Because of this, the EU imports raw materials from other countries. One of the raw materials imported by the EU is Crude Palm Oil (CPO).

The European Union is the largest consumer of Crude Palm Oil (CPO) in the world, and the CPO in the region comes from trade activities between the European Union and Indonesia. Indonesia is the world's largest exporter of CPO, contributing nearly 80% of the EU's demand from 2010 to 2020. However, as the demand for CPO in this region grew, the European Union issued a policy that imposed restrictions on CPO imports from Indonesia. Given the high demand for CPO, the EU should have opened its market to meet the raw material needs in the region. Instead, the EU implemented a policy to limit the import of CPO, especially from Indonesia.

The policy issued by the European Union is the Renewable Energy Directive, which includes restrictions on the import of Crude Palm Oil (CPO) into the EU. Many studies explain the reasons behind the EU's decision to impose a ban on palm oil imports, but this study focuses on the mechanism implemented by the EU in issuing the policy to limit palm oil imports from Indonesia to the EU. By studying these policies and mechanisms, Indonesia can develop more effective strategies and policies to respond to these restrictions. This will allow Indonesia to adjust its export policies to meet the requirements set by the European Union, ensuring that Indonesian CPO products remain accepted in the European market.This research not only helps Indonesia respond more effectively to EU policies but also contributes to the development of more sustainable and mutually beneficial trade strategies for both parties. Therefore, this study is crucial to ensure the sustainability of Indonesia's CPO exports to the European Union.

RESEARCH METHODS

This study uses a qualitative approach with a descriptive method to analyze the European Union's Renewable Energy Directive (RED) policy. The aim of this research is to understand the mechanism behind the restriction of palm oil imports from Indonesia, implemented through the RED policy and non-tariff measures. The time frame of this research is from 2018 to 2024, covering the period of the implementation of RED II by the European Union. The data used is secondary data, including journals, news articles, reports from relevant institutions, and related literature. Data collection was carried out through a literature review and employed triangulation techniques to ensure the validity of the data.

In this study, the data is analysed descriptively and qualitatively through steps such as data collection, reduction, presentation, and drawing conclusions. The research delves into the reasons why the European Union imposed the palm oil import restriction policy, particularly to reduce environmental impacts and promote the use of renewable energy. The analysis also covers the relationship between this policy and its impact on trade between Indonesia and the European Union

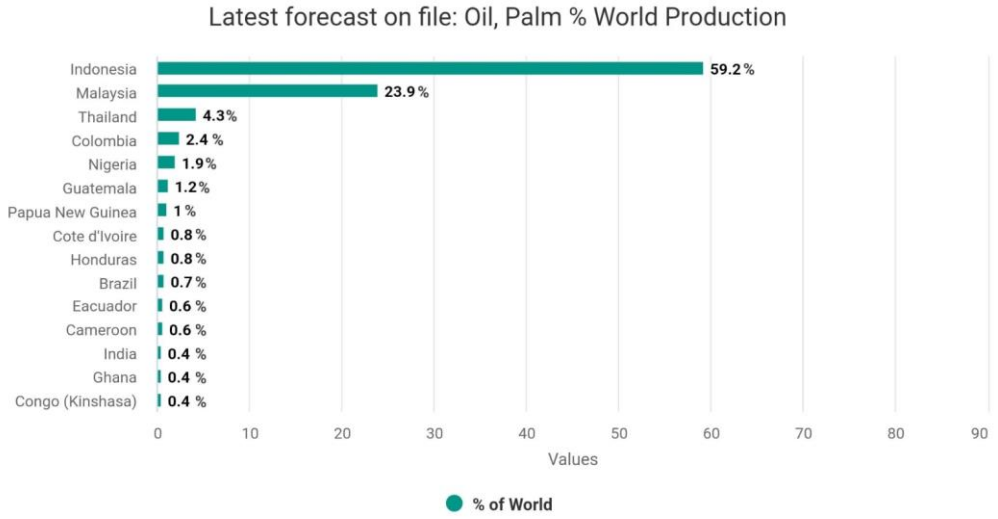
RESULTS AND DISCUSSION

Palm Oil or Crude Palm Oil (CPO) has become the leading vegetable oil in the world. CPO is a versatile commodity in various industries. The global palm oil industry is one of the largest agricultural sectors in the world, with palm oil production expanding across many tropical countries. CPO is a plantation-based commodity whose processed products are used for a wide range of daily needs. For example, it is used in cooking oil, cosmetic ingredients, and as a raw material for energy needs such as biodiesel (USDA, 2018).

The Council of Palm Oil Producing Countries (CPOPC) reported that global CPO production for the 2022/2023 period reached 79.16 million metric tons, with Indonesia contributing 58%, equivalent to 46.5 million metric tons of the total global palm oil production. Not only does Indonesia produce CPO, but it is also the leading exporter of CPO worldwide, accounting for 56% of global CPO exports. Palm oil production exceeds that of other vegetable oils, such as sunflower oil (20.14 million metric tons), rapeseed oil (31.53 million metric tons), and soybean oil (61.9 million metric tons).CPO is a crucial commodity year after year, and the export destination for Indonesian palm oil has been primarily the European Union. Indonesia contributed 80% of the EU's palm oil supply from 2010 to 2020. According to the International Trade Center (ITC), Indonesia exported 1.88 million tons and 1.11 million tons of palm oil to the European Union in 2020 (Arfie, 2018).

The palm oil industry plays a significant role as a raw material for vegetable oils worldwide. CPO remains at the top of the global vegetable oil market and is expected to maintain this position until 2050. The United States Department of Agriculture (USDA) reported that global vegetable oil production in the 2022/2023 period reached 219.8 million tons.

CPO production increased by 8.3 million tons compared to the previous harvest year. Below is the data on global palm oil production. (Andy, 2024, p. 2)



According to USDA data in 2024, global palm oil production is still led by Indonesia, followed by Malaysia and Thailand in third place. CPO has become a strategic global commodity in the world market. CPO has a high productivity rate, ranging from 4 to 8 tons per hectare, and continues to be one of the key vegetable oil commodities worldwide. In terms of productivity, Malaysia has an average yield of 4.56 tons per hectare per year, while Indonesia produces 3.68 tons of CPO per hectare per year (Andy, 2024, p. 9). Data from Indonesia's BPS also shows that palm oil production has seen significant growth from 2018 to 2022. In 2023, Indonesia's palm oil production reached 46.986 million tons of CPO, with a large portion, 27.84 million tons, coming from private companies. Below is the data for CPO production from 2018 to 2023:

In terms of productivity, over the past six years, from 2019 to 2023, Indonesia's palm oil productivity has been recorded at 3.69 tons per hectare. The export of CPO to the European Union is utilized by countries in the region as a substitute for energy. CPO is used for biofuel production, which helps reduce the EU's dependency on fossil fuels.

The European Union has implemented import protection policies through non-tariff barriers such as environmental standards, certification, and due diligence regulations. The aim of this policy is to protect the EU's domestic industry from the competition posed by Indonesia's cheaper palm oil products, which are seen as harmful to local producers. In this regard, the European Union uses environmental standards to reduce greenhouse gas emissions by promoting renewable energy through the Renewable Energy Directive (RED). This policy restricts the use of palm oil as a biofuel feedstock, arguing that palm oil contributes to deforestation, and therefore needs to be tightly regulated.The import restriction mechanism implemented by the European Union is considered a protective step. The EU enforces environmental standards and certification processes to regulate the import of palm oil.

Environmental standards refer to practices that aim to protect the environment and ensure that natural resources and ecosystems remain sustainable, supporting life for both humans and other living beings in the long term. The European Union also uses environmental standards as part of its efforts to reduce greenhouse gas emissions. The EU set emission reduction targets for biofuels, starting with a 35% reduction by 2016, 50% by 2017, and 60% by 2018 (Andrian Pramana, 2021). These environmental standards serve as a protective measure to limit the products entering the EU market, including palm oil imports.

The implementation of environmental standards is part of the EU's strategy for transitioning energy use toward biofuels. To support these standards, the EU introduced a policy called the EUDR, or the European Union Deforestation-

Free Regulation. The EUDR aims to reduce deforestation by imposing requirements on companies or producers placing, supplying, or exporting goods to the EU market. Another goal of the EU is to protect forests and prevent deforestation worldwide, by halting the consumption of commodities derived from land at risk of deforestation, reducing environmental impacts, and mitigating climate change (PASPI, 2024).Under this categorization, the EU classifies palm oil as a high-risk product. The reason is that palm oil is often associated with deforestation, supported by numerous studies linking palm oil expansion to deforestation and its environmental impact.

The EUDR policy implemented by the European Union, which sets land criteria, has an impact on palm oil farmers. This is because when the designated land criteria are not fully met by smallholder farmers, it results in losses for them. Additionally, smallholder farmers who lack understanding of modern technology and do not have access to the necessary technology and capital can easily lose access to the European market (Budiman Minasny, 2024). The costs associated with implementing the EUDR, which are imposed on palm oil farmers, lead to a decrease in prices or an increase in the discount for fresh fruit bunches (TBS). This situation makes it more challenging for smallholders to remain competitive in the global palm oil market, particularly in Europe.

Another environmental standard in the European Union is the RSPO (Roundtable on Sustainable Palm Oil) certification. RSPO refers to an association that aims to unite various sectors of the palm oil industry with a common goal: producers, traders, consumer goods companies, and investors in palm oil. The establishment of RSPO was driven by the rapid growth of the palm oil industry, which has had significant environmental impacts, such as deforestation, the loss of biodiversity, and global climate change. The creation of RSPO sets a standard that must be adhered to by producers in order to produce certified sustainable palm oil, known as RSPO Certified Sustainable Palm Oil (CSPO), ensuring that palm oil production does not harm the environment (Bagaskara, 2022).The RSPO requirements align with the EU's renewable energy regulations. This certification enables palm oil producers and processors to meet the guidelines of Directive 2009/29/EC, which promotes the use of energy from renewable sources. These guidelines define the sustainability criteria for biofuels and bioliquids in the European Union (Bagaskara, 2023).

RSPO refers to an association that aims to unite various sectors of the palm oil industry with a common goal: producers, traders, consumer goods companies, and investors in palm oil. The establishment of RSPO was driven by the rapid growth of the palm oil industry, which has caused significant environmental impacts, such as deforestation, loss of biodiversity, and global climate change. The implementation of RSPO is monitored by the association's members, NGOs, the media, and governments, ensuring that RSPO operates in accordance with its established guidelines.The RSPO was founded in 2004 to promote sustainable palm oil production. It has five core members: the Worldwide Fund for Nature (WWF), the Malaysian Palm Oil Association (MPOA), Unilever Netherlands, Aarhus United UK Ltd (AKK), and Migros Genossenschafts Bund (Switzerland). The association has 5,000 members from 94 countries, with its headquarters located in Zurich, Switzerland, and its secretariat office in Kuala Lumpur. Additionally, it has a representative office in Jakarta, Indonesia.

In addition, the European Union also implements a certification system for products entering the region. Protection in the form of certification is a requirement used to safeguard national interests, such as in international trade. The European Union applies due diligence certification and Strict Traceability certification to ensure that products meet specific criteria and standards. Due diligence certification refers to the process of reviewing and analyzing documents to assess a company's suitability. The goal of due diligence is to uncover information or material facts that can describe a company's operations (Maria, 2023). The European Union implements a due diligence certification system that is based on geolocation, satellite imagery, and global positioning system (GPS) data. This system, which requires a timeline of 18 months for companies planning to export, has been in effect since June 29, 2023.

The European Union categorizes palm oil as a high-risk product, which is why it mandates due diligence processes for Indonesia. Under this regulation, the burden of due diligence falls on the importers, who in turn pass the verification costs and due diligence submission fees on to consumers. To facilitate this, the European Union and Indonesia have set up a task force to collaborate in ensuring that Indonesian products meet the EU's standards (Hendriyo and Kris M, 2023).The traceability system is designed to provide comprehensive information about Indonesian palm oil products and direct market demand toward sustainable products. Due diligence or traceability is considered a form of protectionist measure implemented by the European Union. The EU will track the origins of palm oil commodities by applying a digital product e-passport, ensuring full transparency and verification throughout the supply chain.

The Strict Traceability system, in the context of sustainability certification, is implemented to safeguard claims regarding the sustainability of palm oil. This system ensures that the production process has traceability procedures tailored to the certification supply chosen (Aisyah, 2018). The traceability system is designed to provide comprehensive information about Indonesian palm oil products and direct market demand toward sustainable products. Additionally, it guarantees that palm oil can be produced sustainably and traced throughout its supply chain.

In this aspect, palm oil can be more transparent, ensuring that fresh fruit bunches (FFB) are produced legally and are not linked to environmental or social conflicts. In general, traceability is an effort to trace and identify the history and location of a product. Furthermore, the International Organization for Standardization (ISO) defines traceability as the ability to identify a product throughout its supply chain. This traceability starts from the identification of the palm oil plantation and ends as a finished palm oil product (SIAR, 2021).

In response to the European Union's sustainability standards, Indonesia has developed the Indonesian Sustainable Palm Oil (ISPO) certification. This step is taken to enhance the competitiveness of Indonesian palm oil in the global market, particularly in the European Union, which requires products to meet sustainability criteria. However, despite these efforts,

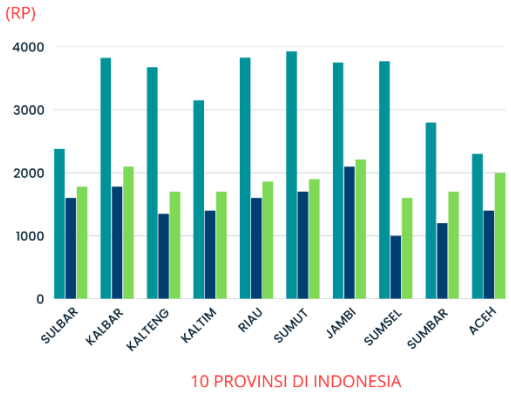
the European Union's policies continue to present significant challenges for smallholder farmers in Indonesia. Many of them lose access to global markets due to their inability to meet the technological, certification, and due diligence standards imposed.

In light of the environmental standards implemented by the European Union, Indonesia has taken steps to ensure that the reputation of palm oil does not suffer in the international market. To counteract this, Indonesia established the ISPO (Indonesian Sustainable Palm Oil). ISPO functions as an effort to increase the competitiveness of Indonesian palm oil, especially in the European Union, by reducing greenhouse gas emissions (Fuady, 2014). In this regard, both RSPO (Roundtable on Sustainable Palm Oil) and ISPO compete to dominate global palm oil governance certification.ISPO is aligned with Law No. 39 of 2019 on Plantations and the Minister of Agriculture Regulation No. 19/Permentan/OT.140/3/2011, which provides guidelines for Indonesian palm oil. This certification scheme is a strategic effort by Indonesia to meet sustainability expectations while maintaining access to important markets like the European Union. (Molasy, 2015)

ISPO (Indonesian Sustainable Palm Oil) is part of Indonesia's commitment to environmental concerns, specifically efforts to reduce greenhouse gas emissions and focus on the concept of sustainable development. With the implementation of ISPO, it is expected that palm oil from Indonesia will follow sustainable development principles, ensuring the protection of Indonesia's palm oil exports in the global market (Purba, 2019).

The RED (Renewable Energy Directive) policy and ISPO are seen as two interconnected initiatives. The elements of ISPO's policy are aligned with the RED, particularly in aspects such as land use, planting practices, and the regulation of greenhouse gas emissions. These areas serve as the foundational principles for the ISPO policy (Wahyudi, 2019).In this context, ISPO helps ensure that Indonesia's palm oil industry adheres to the international sustainability standards, thus enabling Indonesia to navigate the challenges posed by policies like RED while maintaining access to important markets such as the European Union. By aligning with both environmental goals and market demands, ISPO becomes a critical tool for the long-term sustainability of Indonesia's palm oil exports.

The impact of the policy is also felt in the economic sector. The reduction in CPO exports to the European Union led to a surplus of products in the domestic market, resulting in a decline in the price of tandan buah segar (TBS, fresh fruit bunches). As a consequence, the country's foreign exchange earnings decreased, and local farmers' income was significantly affected. According to a press release from the Palm Oil Farmers Union (SPKS), the ban on palm oil exports impacted Indonesia, with the price of TBS in 10 provinces experiencing a decline. The data below shows the decrease in TBS prices for local farmers in 10 palm oil-producing provinces in Indonesia. The price decline occurred after the European Union imposed the import ban. The data also indicates a price increase for palm oil after the import ban was lifted by the European Union.



From the data, it can be seen that the lowest decline occurred in Jambi Province, while the highest decline was in South Sumatra Province. The drop in palm oil prices was caused by the accumulation of Fresh Fruit Bunches (TBS) in the domestic market. Palm oil products that were supposed to be sold to Europe have piled up in the local market. As a result, the local market in Indonesia was flooded with palm oil products, leading to a decrease in TBS prices. Additionally, the implementation of Environmental Standards and Certification Systems led to a decline in exports from 2017 to 2024. The data below shows that Indonesia's CPO exports to the European Union increased from 2017 to 2019. However, CPO exports in 2020 experienced a decline due to the impact of the COVID-19 pandemic on Indonesia. Moreover, the export decline was exacerbated by the imposition of a ban on CPO imports issued by the European Union.

Furthermore, the management of the palm oil industry in Indonesia emphasizes technological efficiency, raw material quality, and compliance with environmental standards. These measures include the use of transparent and environmentally friendly production methods, which are expected to improve the competitiveness of products in international markets. However, Indonesia still faces significant challenges in dealing with the European Union's protectionist policies. While the European Union claims that this measure is part of climate change mitigation, the policy is considered discriminatory against Indonesian palm oil. This raises concerns about the sustainability of the palm oil industry and global market access for small producers.

CONCLUSION

From the explanation provided, it can be concluded that the mechanism employed by the European Union to restrict the import of Crude Palm Oil (CPO) from Indonesia involves using non-tariff methods by implementing environmental standards and certification. The environmental standards applied by the European Union are outlined in the Renewable Energy Directive policy. Import restrictions on CPO are enforced through the issuance of the EUDR policy and the imposition of RSPO certification as a requirement for goods entering the European Union market. This policy imposes strict requirements on companies or producers that place, provide, or export goods to the European Union market.

Furthermore, the European Union also mandates a certification system for imported products, including due diligence and full traceability systems. The due diligence process involves verification based on geolocation, satellite imagery, and global positioning systems (GPS) to ensure the products are free from deforestation practices. Palm oil is categorized as a high-risk product, requiring Indonesia to meet these due diligence standards. In addition, full traceability has also become a key requirement, with the implementation of a digital e-passport to track the origin of palm oil products throughout the supply chain.

The implementation of both these requirements has had significant effects on CPO producers in Indonesia. These policies have led to a decline in CPO exports to the European Union, resulting in an oversupply of fresh fruit bunches (TBS) in the domestic market. This accumulation of TBS has pressured prices at the local level, creating negative economic impacts, particularly for smallholder farmers who rely on income from the palm oil sector. This reflects the major challenges faced by Indonesia in meeting the European Union's sustainability standards while also maintaining the economic sustainability of the domestic palm oil sector.

RECOMMENDATION

Based on the findings in the research regarding the European Union's import restriction mechanism on Crude Palm Oil (CPO) from Indonesia for biofuel, several recommendations for future research development can be formulated as follows:

1. In-depth research is needed to understand how these import restriction policies affect the welfare of smallholder farmers, particularly in terms of income, market access, and technology adoption.
2. Further research could focus on the effectiveness of the Indonesian Sustainable Palm Oil (ISPO) in enhancing the competitiveness of Indonesian palm oil in the global market.
3. Future studies could explore technologies and innovations that can improve the sustainability of palm oil production, such as the application of digitalization in supply chain tracking, more efficient waste management, or the development of biofuel technology from alternative feedstocks.
4. Further studies could delve into the aspects of economic diplomacy in responding to the European Union's protectionist policies. This research could explore the role of bilateral and multilateral negotiations, as well as strategic efforts to strengthen Indonesia's position in international trade organizations such as the WTO.

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